

Groovy Poised

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For Java

- Runs on the Java Virtual Machine (JVM)
- Implemented in Java technology
- Interoperability

Strings

- Single - Double Quote

```
def city1='bangalore'  
def city2="bengaluru"
```

- Triple Single / Double Quotes

```
def msg = """"
```

```
<p>
```

```
    Welcome to Bangalore
```

```
    Presenting at Jax Conf
```

```
</p>
```

```
""""
```

GStrings

```
def city='Bangalore'  
def name="Harshad"  
def msg = """"  
<p>  
    Welcome to ${city}  
    Presenting at Jax Conf  
</p>  
""""  
  
println "Hello ${name}!" + msg
```

Closures

- Closable block of code

```
def multiply= {x, y -> println x * y}
```

```
def squarenum = { println it * it}
```

Native syntax - Lists

```
def list = ["Sachin", "Rahul", "Saurav", "Laxman"]
```

```
list - "Saurav"
```

```
list << "Dhoni"
```

```
def shortnames = list.findAll { it.size() < 6 }
```

```
println "Names Shorter Than Six : ${shortnames.size()}"
```

```
shortnames.each { println it }
```

```
def nums = [1, 2, 3, 4]
```

```
def numCheck = nums.every { it < 5 }
```

Native syntax - Maps

```
def runs = [ "Sachin":62, "Dravid":200, "Laxman":71,  
"Dhoni":87 ]
```

```
println "Sachin Scored: " + runs["Sachin"]
```

```
println "Dravid Scored: " + runs.Dravid
```

Native syntax - Range

```
def digits = 1..9
```

```
def even = digits.findAll { it % 2 == 0 }
```

```
even.each { println "Even: "+it }
```

```
( 1..4 ).each { println it }
```

```
for (item in 0..10) { println item }
```

Groovy Dates

```
def today = new Date ()
```

```
def tomorrow = today + 1
```

```
def yesterday = today - 1
```

```
println "Today ${today}"
```

```
println "Tomorrow ${tomorrow}"
```

```
println "Yesterday ${yesterday}"
```

```
println tomorrow.compareTo(yesterday)
```

Groovy JDK

- Methods added to the JDK to make it more groovy
- Object, String and many other commonly used classes are far more powerful in Groovy, than in Java

Groovy Builders

- MarkupBuilder - outputs XML / HTML markup
- SwingBuilder - creates rich Swing user interfaces using a simple markup
- Ant, Http, Dom...

Groovy Beans

- Properties - Declared with no access modifier
- Generates a private field with public getter and setter
- You can use `.@` to access the field and not the get set method

Meta Object Protocol

- MOP lets you manipulate the language itself
- Grails makes great use of MOP

Other Features

- `?.` Prevents `NullPointerException`s
- return statement is optional
- you don't need to specify a return type - default `Object`
- Optional parenthesis
- By default classes and methods are public

Thank You

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